

Serial No.: 09/774,429

Attorney's Docket No.: 10559/340001/P9885

Amendment to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method comprising:

determining at a first classifying forwarding element if a classification parameter is available for Internet Protocol security (IPsec) traffic that indicates a route for the IPsec traffic and classifying said traffic if available;

if said classification parameter is not available, and the IPsec traffic is encrypted then decrypting traffic in a decrypting forwarding element separate from the first classifying forwarding element after said traffic has passed through said classifying forwarding element, and determining the classification parameter for the IPsec traffic ~~at the decrypting forwarding element~~; and

forwarding the IPsec traffic based on the classification parameter; and

providing the classification parameter to the first classifying forwarding element.

2. (Previously Presented) The method of claim 1 further comprising receiving the IPsec traffic at the classifying forwarding element.

Serial No.: 09/774,429

Attorney's Docket No.: 10559/340001/P9885

3. (Original) The method of claim 1 in which the classification parameter includes a security parameter index (SPI) associated with the IPsec traffic.

4. (Original) The method of claim 1 in which the IPsec traffic includes a data packet.

5. (Currently Amended) The method of claim 1 further comprising forwarding receiving at the first classifying forwarding element other IPsec traffic included in a traffic stream with the IPsec traffic, and further comprising forwarding the other IPsec traffic based on the provided classification parameter.

6. (Currently Amended) An article comprising:
a machine-readable medium which stores machine-executable instructions, the instructions causing a machine to:

determine at a first mechanism if a classification parameter is available for Internet Protocol security (IPsec) traffic that indicates a route for the IPsec traffic;

if a classification parameter is not available,
sending said traffic to a second mechanism separate from the first mechanism after said traffic has passed said first mechanism, and which second mechanism decrypts the IPsec traffic

Serial No.: 09/774,429

Attorney's Docket No.: 10559/340001/P9885

if the IPsec traffic is encrypted and determine the classification parameter for the IPsec traffic ~~at the second~~ mechanism; and

forward the IPsec traffic based on the classification parameter; and

provide the classification parameter to the first mechanism.

7. (Original) The article of claim 6 further causing a machine to receive the IPsec traffic at the first mechanism.

8. (Original) The article of claim 6 in which the classification parameter includes a security parameter index (SPI) associated with the IPsec traffic.

9. (Original) The article of claim 6 in which the IPsec traffic includes a data packet.

10. (Currently amended) The article of claim 6 further causing ~~a machine~~ the first mechanism to forward other IPsec traffic included in a traffic stream with the IPsec traffic based on the provided classification parameter.

Serial No.: 09/774,429

Attorney's Docket No.: 10559/340001/P9885

11. (Currently Amended) A system comprising:

a classifying forwarding element configured to communicate with a network, to determine if a classification parameter that indicates a route for a traffic stream is available for a packet included in the traffic stream; and

a control element in communication with the classifying forwarding element, the control element configured to receive information including classification information for the traffic stream and cryptographic information for the traffic stream, the control element further configured to transmit at least some classification information to the classifying forwarding element and to transmit at least one key based on the cryptographic information to a decryption forwarding element separate from the classifying forwarding element; and

wherein the decryption forwarding element is configured to receive the packet from the classifying forwarding element, and to perform an encryption-related procedure on the packet if the packet is encrypted and associated with a known encryption-related the at least one key, and determine said classification parameter, if the classification parameter is available from either of said forwarding elements, to forward the packet based on the route for the traffic stream.

Serial No.: 09/774,429

Attorney's Docket No.: 10559/340001/P9885

12. (Currently Amended) The system of claim 11 wherein the control element is configured to receive at least some of the cryptographic information in an Internet Key Exchange packet~~further comprising a third mechanism configured to communicate with the classifying forwarding element and with the decryption forwarding element and to determine a classification parameter for the packet if a classification parameter is not available.~~

13. (Currently Amended) The system of claim 12 in which the second mechanism is also configured to forward the packet to the ~~third mechanism~~ control element if the packet is not associated with a known encryption-related key.

14. (Currently Amended) The system of claim 12, wherein the decryption forwarding element is included in a plurality of decryption forwarding elements, each in communication with at least one server of a plurality of servers, and wherein the control element includes security information for each of the plurality of servers~~in which the third mechanism is also configured to, after determining the classification parameter for the packet, forward the classification parameter to the first mechanism.~~

Serial No.: 09/774,429

Attorney's Docket No.:10559/340001/P9885

15. (Currently Amended) The system of claim 12, wherein the cryptographic information includes an encryption-related key
~~in which the third mechanism is also configured to, after determining the encryption related key for the packet, forward the encryption related key to the decryption forwarding element so that the decryption forwarding element can perform the encryption-related procedure.~~

16. (Cancelled)

17. (Previously Presented) The system of claim 11 further comprising a plurality of additional mechanisms, each additional mechanism configured to communicate with the classification forwarding device to perform an encryption-related procedure on the packet if the packet is encrypted and associated with a known encryption-related key, and, if the classification parameter is available, to forward the packet based on the route for the traffic stream.

18. (Original) The system of claim 11 in which the packet includes an Internet Protocol security data packet.

Serial No.: 09/774,429

Attorney's Docket No.: 10559/340001/P9885

19. (Original) The system of claim 11 in which the traffic stream includes a plurality of Internet Protocol security data packets.

20. (Original) The system of claim 11 in which the first mechanism is also configured to forward the packet to the second mechanism if the packet is encrypted.

21. (Original) The system of claim 11 in which the route for the traffic stream includes a route through a network.

22. (Original) The system of claim 21 in which the network includes an Internet.

23. (Previously Presented) The system of claim 11 in which the encryption-related procedure includes encrypting the packet.

24. (Previously Presented) The system of claim 11 in which the encryption-related procedure includes decrypting the packet.

25. (Original) The system of claim 11 further comprising another mechanism configured to receive the packet from the second mechanism and to forward the packet based on the route to an ultimate destination of the packet.

Serial No.: 09/774,429

Attorney's Docket No.:10559/340001/P9885

26. (Original) The system of claim 11 in which the first mechanism is also configured to route packets included in the traffic stream based on a load balancing scheme.

27 - 30. (Cancelled)